PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to responsible a collection of information unless it contains a valid OMB control number.

Substitu	te for form 1449A/PTO		Ven s	RADEMAR	Complete if Known
INFO	DRMATION 1	DISC		Application Number	09/836,449
	TEMENT BY			Filing Date	April 17, 2001
SIA				First Named Inventor	Stephen J. FONASH
	(use as many sheets	as necesso	ary)	Group Art Unit	2812
_				Examiner Name	Richard A. Booth
Sheet	1	of	1	Attorney Docket Number	201009-007000

	U.S. PATENT DOCUMENTS							
	Cite No.1	U.S. Patent Document		Name of Patentee or Applicant of Cited	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	İ	Number	Kind Code ² (if known)	Document	MM-DD-YYYY			
fly _		5,594,1	171	Ishida et al.	January 14, 1997			
	 -							

			F	DREIGN PATENT DOC	UMENTS		
Examiner Initials	Cite No.	Foreign Patent I Office ³ Number	Kind Code	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
114		EP 0 895 27	6 A1	Bruno Murari	March 2, 1999		
7	<u> </u>						
_	+	+					
		O 1	THER PRIOR	ART – NON PATENT LITE	RATURE DOCUMENTS		
Examiner Initials	Cite No.		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.)., date, page(s), volume-issue number(s), publisher, city and/or country where published.				
//A		Supplementary	Partial Eur	opean Search Report			
	T	FURUKAWA,	et al. Nick	el Surface Micromac	hining, Sixth Internat	ional Symposium on	1
				n Science, 1995, pp.		• •	
		WALTER LANG, Silicon Microstructuring Technology, Materials Science and					
Ho		Engineering, Reports: A Review Journal R17 (1996), pp. 1-55.					
			/				
Examiner		11/1/20	7/1	D	ate D	7/24/	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

Signature

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.

RECEIVED CENTRAL FAX CENTER

JUN 1 2 2006

Substitute	of form 14	49A/PTO		_			Сон	rolete i	f Knows	,		
INFORMATION DISCLOSURE			Application Number 09/836,449									
ľ					Piling Date				April 17, 2001			
STAT	TEMEN	NT BY APP	LICAN	T	First Named Invent					n J. FONAS	н	
	(tota as m	ony sheets as necess	(ערש		An Unit	х			2812	41 J. 1 OIVAG	11	
					Examiner Name					d A. BOOTI	y	
Sheet	,	of	Ti		Attorney Docker No						1	
			<u> </u>		Andriey Docker No	minder		1	20100	9-007000		
		,		Ľ	S. PATENT DOC	UMEN	TS					
Brandner Inhiels	Cite No.'	U.S. Pitten De Number - Kind Code			Publication Date 3004-DD-YYYYY			ne of Puer nt of Ched	sice or Document	Pages, Colu Relevant Pa Flys	mes. Linco magno er i res Appea	Lebrount
	+						 			<u> </u>		
	 	 	-	<u> </u>			+					
	┼			├			 					
	+	 										
	 	 		-			+					
	 						+			- 		
	+			_			 					
	T -						† 				-	
	1			_			1					
				_			1					
							1	•				
		L										
		<u></u>		EOD	EIGN PATENT D	OCUM	ONFTO					
Examples	Cue	F 8		Î	DAON'S ALERT D	-	21113			Tanan Catuman	T	
Entinte	No.	Foreign Pater	Kind Co		Publication Date MN-DD-YYYY		Name of	Name of Paternee or Line plication of Cited Document Releva		Peges. Columns. Lines, Where Relevant Passages	1	_
۸.		Country Code ^a Numb	or Alba		50-500-1111		Application of	Charles		or Relevant Figures. Appear		7
1114	 	DE 198 41 43	0 Ai		09/10/1998						Full	
14/	1											
											L	
L	<u> </u>	<u> </u>				L					<u></u>	
	-	OTTIER	PD/OD 1					200	124 222	<u> </u>		
_					NON PATENT							1
Examiner Initials	Cite No. ¹	include item (b	ook, magazin	, journ	in CAPITAL LETTE: al, acrial, symposium publisher, city and/or o	catalog, c	tti.), date, pr	age(s), vo	ppropriate lumo-issu	, title of the coumber(s),		r°
]											
لـــــا	<u> </u>	, ,	71 -									L
Examiner Signature	Kello	all 1	HA			Date Consi	dored	0	7/	3/06		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04. ¹ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must procede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. ¹ Applicant is to place a check mark here if English language Translation is attached.

MAY 0 9 2006 E

Substitute for form 1449A/PTO

1

Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

1

 Complete if Known

 Application Number
 09/836,449

 Filing Date
 April 17, 2001

 First Named Inventor
 Stephen J. FONASH

 Art Unit
 2812

 Examiner Name
 Richard A. BOOTH

 Attorney Docket Number
 201009-007000

U.S. PATENT DOCUMENTS					
Cite No.1	U.S. Patent Document Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	US 4,881,589	11/21/89	Hartmann et al.		
ļ		•			
 					
 	<u> </u>				
 -					
			•		
<u> </u>					
<u> </u>					
 					
 					
	Cite No.1	No. 1 Number - Kind Code ¹ (if known)	U.S. Patent Document Publication Date	Number - Kind Code ² (if Isnown) US 4,881,589 11/21/89 Hartmann et al.	

		FO	REIGN PATENT DOC	UMENTS		
Examiner Initials	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where	_
		Country Code ³ Number ⁴ (if known)	MM-DD-YYYY	Application of Cited Document	Relevant Passages or Relevant Figures Appear	Τ⁴
16		EP 0 297 258 B1	01/04/1989			Abstract Only
11/9		EP 0 993 029 A2	12/04/2000			Abstract Only
110		DE 198 41 430 A1	05/25/2000			Abstract Only
						İ

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
		4				

Examiner Signature	My Shore ofth	Date Considered	07/27/06	

[•] EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. ¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

DEC 1 9 2005 By

Sheet

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of

c	Complete if Known					
Application Number	09/836,449					
Filing Date	April 17, 2001					
First Named Inventor	Stephen J. FONASH					
Art Unit	2812					
Examiner Name	Richard A. BOOTH					
Attorney Docket Number	201009-007000					

	U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.	U.S. Patent Document Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
1185		US-6,486,041	11/26/02	Henley, et al.			
77		US-6,399,177	06/04/02	Fonash, et al.			
		US-6,372,608	04/16/02	Shimoda, et al.			
		US-6,225,192	05/01/01	Aspar, et al.			
		US-6,214,701	04/10/2000	Matsushita, et al.			
	Ī	US-6,158,824	12/12/00	Yonemura, et al.			
		US-5,854,123	12/29/98	Sato, et al.			
		US-5,641,709	06/24/97	Lee			
		US-5,690,753	11/25/97	Kawauchi, et al.			
		US-5,690,763	11/25/97	Ashmead, et al.			
		US-5,811,348	09/22/98	Matsushita, et al.			
		US-5,866,204	02/02/99	Robbie, et al.	<u> </u>		
		US-6,555,443	04/29/03	Artmann, et al.			
		US-5,242,863	09/07/93	Xiang-Zheng, et al.			
		US-6,774,010	08/10/04	Chu, et al.			
		US-5,594,171	01/14/97	Ishida, et al.			
		US-5,811,348	09/22/98	Matsuchita, et al.			
		US-5,854,123	12/29/98	Sato, et al.			
	ł	US-5,866,204	02/02/99	Robbie, et al.			
		US-6,158,824	12/12/00	Yonemura, et al.			
		US-6,214,701	04/10/01	Matsushita, et al.	-		
].	US-6,225,192	05/01/01	Aspar, et al.			
		US-6,372,608	04/16/02	Shimoda, et al.			
		US-6,486,041 B2	11/26/02	Henley, et al.			
		US-6,399,177	06/04/02	Fonash, et al.			
		US-6,449,079 B1	09/10/02	Hermann			
		US-6,555,443	04/29/03	Artman, et al.			
		US-6,774,010	08/10/04	Chu, et al.			
		US-5,854,123	12/29/98	Sato, et al.			
		US-6,905,655	06/14/05	Sato, et al.			
		US-2002/0068419	06/06/02	Sakaguchi, et al.			
La	T T	US-2002/0197836	12/26/02	Lyer, et al.			
1179		US-2002/0020053	2/21/2002	Fonash, et al.			

	FOREIGN PATENT DOCUMENTS							
Examiner Initials	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant			
		Country Code ³ Number ⁴ (if known)	MM-DD-YYYY	Application of Cited Document	Figures Appear	T*		
1/2		DE 198 41 430	05/25/00					
1/1/		EP 0 993 029	04/12/00					

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

W671689 v1

07/23/00

Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. ¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

DEC 1 9 7005 W

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete if Known					
Application Number	09/836,449				
Filing Date	April 17, 2001				
First Named Inventor	Stephen J. FONASH				
Art Unit	2812				
Examiner Name	Richard A. BOOTH				
Attorney Docket Number	201009-007000				

		FC	DREIGN PATENT D	OCUMENTS_		
Examiner Initials	Cite No.	Foreign Patent Document Kind Code ³ Country Code ³ Number ⁴ ((f known)	Publication Date MM-DD-YYYY	Name of Patentee or Application of Cited Document	Pages, Cohmins, Lines, Where Relevant Passages or Relevant Figures Appear	т•
1/1/5		EP 895 276 A1	02/99			
1		EP 0 297 258	04/08/92			1
		WO 00/74932 A1	12-14-00			
		WO 01/80286 A2	10-25-01			1
		WO 03/050854 A2	06/19/03			
1179		WO 99/27325 A2	06/99			
		OTHER PRIOR	ART – NON PATENT L	ITERATURE DOCUMENTS		
Examiner Cite Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of to item (book, magazine, journal, serial, symposium, catalog, etc.)., date, page(a), volume-issue number publisher, city and/or country where published.				T ²		
11		LEE, et al., A novel fabrication technology for Si TFTs on flexible substrates, ECS Extended Abstract No. 791, Electrochemical Society meeting, October 2000.				
	·	WAGNER, et al., Flexible display enabling technology, Cockpit Displays VIII: Displays for Defense Applications, Proc. SPIE Vol. 4362, p. 226-244, September, 2001.				
		STURM, et al., Enabling T Displays for Defense Appl				
		LI, et al., Transfer approac Extended Abstracts No. 64				
	LEE, et al., High Performance Poly-Si TFTs on Plastic Substrates Using a Nano-Structured Separation Layer Approach, IEEE Electron Device Letters, Vol. 24, No. 1, January 2003.					
		KALKAN, et al., Nanocrystalline Si Thin Films With Arrayed Void-Column Network Deposited By High Density Plasma, Journal Of Applied Physics, Vol. 88, No. 1, July 1, 2000, PP. 555-561.				
		TAYANAKA, et al., Thin-Film Crystalline Silicon Solar Cells Obtained By Separation Of A Porous Silicon Sacrificial Layer", Crystalline Silicon Solar Cells And Technologies, Vol. 2, July 6, 1998, PP. 1272-1277.				
A1.		CHOU, et al., Nanoimprin	lithography I V	ac Sci Toch P 1006	14(6) 4120 4122	+

Examiner Signature Date Considered 0 7/23 / b

*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. ¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature

stitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

2812 Art Unit Richard A. BOOTH Examiner Name Attorney Docket Number 201009-007000

Filing Date

Application Number

First Named Inventor

Complete if Known

09/836,449

April 17, 2001

Stephen J. FONASH

		_ F(DREIGN PATENT DO	CUMENTS			
Examiner Initials	Cite No.	Foreign Patent Document Kind Code ² Country Code ³ Number ⁶ (if Inown)	Publication Date MM-DD-YYYY	Name of Patentee or Application of Cired Document	Pages, Cohmins, Lines, Where Relevant Passages or Relevant Figures Appear	т•	
		· · · · · · · · · · · · · · · · · · ·					
	+					7	
	1						
		OTHER PRIOR	ART - NON PATENT LI	TERATURE DOCUMENTS			
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
116		COLBURN, et al., Step and Flash Imprint Lithograph, Solid State Technology, July 2001.					
	. ;	RESNICK, et al., High Resolution Templates for Steps and Flash Imprint Lithograph, J. Microlith., Microfab., Microsyst., Vol. 1 No. 3, October 2002.					
		BENDER, et al., Multiple Imprinting in UV based Nanoimprint Lithography: Related Materials Issues, Microelectronic Engineering, 61-62 (2002), pp. 407-413.					
		TANIGUCHI, et al., Measurement of Adhesive Force Between Mold and Photocurable Resin in Imprint Technology, Jpn. J. Appl. Phy. Vol. 41, 2002, 4194-4197.					
		MARSEN, et al., Fullerene-Structured Nanowires of Silicon, Physical Review B, Vol. 60, Number 16, October 15, 1999, 593-600, The American Physical Society.					
		PENG, et al., Formation of Nanostructured Polymer Filaments in Nanochannels, JACS Communications, American Chemical Society, received February 6, 2003.					
		EDITED BY – H. BALTES, W. GÖPEL, J. HESSE, Sensors Update, Volume 4, Wiley-Vch Verlag GmbH, D-69469 Weinheim, Federal Republic of Germany, 1998, 1-220.					
		E.I. GIVARGIZOV, Funda 31, 1975, 20-30, North-Ho			of Crystal Growth,	·	
10			-Induced Growth and Deposition of Noble-Metal Nanoparticles man Scattering, Nano Letters, 2003 Vol. 3., No. 5, 593-596, ety.				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Considered

Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is

OFE IAPRO WE

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Complete & Islam.					
Application Number	09/836,449	-			
Filing Date	April 17, 2001				
First Named Inventor	Stephen J. FONASH				
Art Unit	2812				
Examiner Name	Richard A. BOOTH				
Attorney Docket Number	201000 007000				

Complete if Known

		FC	DREIGN PATENT DO	CUMENTS			
Examiner initials	Cite No. ¹	Foreign Patent Document Kind Code* Country Code* Number* ((f known)	Publication Date MM-DD-YYYY	Name of Patentee or Application of Cited Document	Pages, Cohimms, Lines, Where Relevant Passages or Relevant Figures Appear	Т ⁴	
· _							
						1	
		<u> </u>					
	٠	OTHER PRICE	A DT _ NON PATRAT I	TERATURE DOCUMENTS		<u>. </u>	
Examiner	Cina				inan) siste of the	T ²	
Initials							
H. G. CRAIGHEAD, Issues In Nanotechnology Review - Nanoelectromechanical Systems, Science Mag. November 24, 2000, Vol. 290, 532-1535. FRITZ, et al., Translating Biomolecular Recognition into Nanomechanics, Science Magazine, April 14, 2000, Vol. 288, 316-318.					omechanical		
					anics, Science		
	WAGNER, et al., Vapor-Liquid-Solid Mechanism Of Single Crystal Growth, A Physics Letters, Vol. 4, Number 5, March 1, 1964, 89-90.						
	,	MICHAEL ROUKES, Nanoelectromechanical System Face The Future, Physicsweb, Feature: February 2001, 1-6, http://physicsweb.org/articles/world/14/2/8/2.					
My		CHENG, et al., Role of Electric Field on Formation of Silicon Nanowires, Journal of Applied Physics, Vol. 94, Number 2, July 15, 2003, 1190-1194 American Institute of Physics.					
	:						
		1					
		// //	· · · · · · · · · · · · · · · · · · ·		/		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Considered

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ³ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.